



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/801,929	03/09/2001	Charles Patrick Thacker	03797.00092	3449

28319 7590 10/17/2006

BANNER & WITCOFF LTD.,  
ATTORNEYS FOR CLIENT NOS. 003797 & 013797  
1001 G STREET, N.W.  
SUITE 1100  
WASHINGTON, DC 20001-4597

EXAMINER

NGUYEN, JIMMY H

ART UNIT

PAPER NUMBER

2629

DATE MAILED: 10/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/801,929	<b>Applicant(s)</b> THACKER ET AL.	
	<b>Examiner</b> Jimmy H. Nguyen	<b>Art Unit</b> 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,4-7,9,25,26,28-38 and 40-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-7,9,25,26,28-38 and 40-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/31/2006 has been entered. Claims 1, 4-7, 9, 25, 26, 28-38 and 40-47 are currently pending in the application. An action follows below:

#### ***Drawings***

2. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### ***Notice to Applicants***

3. Examiner suggests the Applicants to change "a shift function", "a control key function", and "an alternate function" to "a keyboard Shift function", "a keyboard Control function", and "a keyboard Alternate function", respectively, in order to clarify the claimed invention, because the limitation from the specification can't be read into claims as argued by Applicants, see the amendment, page 11, lines 1-9.

Art Unit: 2629

4. Examiner suggests the Applicants to recite either “a stylus” or “a digitizing pen”, but not both, in the claims, in order to avoid the confusion. Since either “a stylus” or “a digitizing pen” is not the invention of the pending application, Examiner expects the Applicants to accept this suggestion.

5. It is in the best interest of the patent community that applicant, in his/her normal review and/or rewriting of the claims, to take into consideration these editorial situations and make changes as necessary.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 1, 4-7, 9, 25, 26, 28-38 and 40-47 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As per claims above, the disclosure, when filed, does not fairly convey to one of ordinary skill in the art that applicants had in their possession the claimed features, “receiving a user selection of at least one function selected from a list consisting of a shift function, a control key function, and an alternate function and sending a mouse button event modified by the selected function” recited in independent claims 1 and 5 or “responsive to a second stylus input, sending a mouse button event modified in accordance with the user-selected keyboard function”

Art Unit: 2629

recited in independent claim 32. The original disclosure, specifically page 15, lines 2-6, teaches that a display user interface (300) includes keyboard soft keys such as a RIGHT 301, CTL key (302), a SHIFT key (303), an ALT key (304) key, and BULL'S-EYE 305, and **when RIGHT 301 is selected, the next pen touch causes a right button event** and when a CTL key or SHIFT key is selected, a CTL key or a SHIFT key respectively accompanies the next pen touch. In other words, the above mentioned disclosure expressly teaches that only a RIGHT function is **preprogrammed** to cause a right button event activating or a right button event is **preprogrammed** in according with the selected RIGHT function. Accordingly, the above mentioned disclosure does not fairly teach a mouse button event being **modified** or a mouse button event being modified or preprogrammed by the selected function such as CTL key (302), a SHIFT key (303), or an ALT key (304).

Furthermore, the original disclosure, specifically page 15, lines 16-19, expressly teaches “When one or more of the modifiers CTL 302, SHIFT 303 and ALT 304 is active and a user taps in the pen tip with within BULL'S- EYE 305, UI send a right click event plus **the modifier(s)** to the window immediately below BULL'S\_EYE 305”. In other words, the mentioned disclosure expressly teaches that a combination of an activation of one of CTL, SHIFT and ALT functions and a selection of BULL'S-EYE is **preprogrammed** to cause a right button event plus the modifier(s) to be activated or a right button event plus the modifier(s) is **preprogrammed** in according with **a combination** of the selected one of CTL, SHIFT and ALT functions and the selected BULL'S-EYE. Accordingly, the above mentioned disclosure does not fairly teach a mouse button event being **modified** (or preprogrammed) by the selected keyboard function such as CTL key (302), a SHIFT key (303), or an ALT key (304), as presently claimed.

Art Unit: 2629

Additionally to claim 45, the disclosure, when filed, does not fairly convey to one of ordinary skill in the art that applicants had in their possession the claimed feature, “**responsive to determining that the predetermined gesture does not precede the stylus input, generating a left button mouse event**”. The original disclosure, specifically page 13, last two lines teaches “Preferably, the default event that is sent to an application when the pen touches the writing surface is a “left button down” event”. This mentioned disclosure does not expressly teach “determining that the predetermined gesture does not precede the stylus input”. Accordingly, the disclosure does not teach the above underlined feature.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

9. Claims 1, 4-7, 9, 25, 26, 28-38 and 40-47 are rejected under 35 U.S.C. 102(e) as being anticipated by Mathews et al. (US 6,903,730 B2), hereinafter Matthews.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

As to these claims, since the Mathews reference includes the same drawings and the specification as those of the pending application, all the claimed limitations are read in the disclosure of the Matthews reference.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akiyama et al. (US 6,018,336), hereinafter Akiyama.

As per claims 5 and 6, the claimed invention reads on the Akiyama reference as follows: Akiyama discloses a method (a mouse function emulation method, see col. 1, line 61) for emulating a two-button mouse-type computer input device (a tablet 14 and a LCD 17, see Fig. 1) comprising steps of displaying a user interface (a tool bar 172, see Figs. 4A-4B) having a plurality of selectable functions (a "MOVE" function, a "HELP" function, and a "RIGHT

Art Unit: 2629

CLICK” function corresponding to the bull’s eye function, and more functions, see Fig. 3, col. 4, lines 7-13, and col. 6, lines 1-2 and lines 38-43); receiving a user selection of “RIGHT CLICK” function via a pen 15 (see Fig. 1, col. 3, lines 21-22) after the computer input device (14, 17) being placed in a default mode (see col. 3, lines 57-67); and sending a right button event or a mouse button event modified by the selected function (“RIGHT CLICK” function). Accordingly, the difference between the invention defined by these claims and the invention of Akiyama in view of Moran is that Akiyama does not explicitly teach that the selectable functions including a Shift, Control key, or Alternate key function.

However, Akiyama further teaches “However, the other mouse functions can be emulated by increasing the selection button of the other mouse functions” (see col. 6, lines 1-2 and lines 38-43). Therefore, while Akiyama may not exemplify particular selectable key function being a Shift, Control, or Alternate key function, one of ordinary skill in the art would have found it obvious to provide a Shift, Control, and/or Alternate key function(s) in the user interface of Akiyama in accordance with a particular application and an allusion of Akiyama (see col. 6, lines 29-53).

12. Claims 1, 7, 9, 25, 26, 28, 29, 31, 45 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akiyama and further in view of Moran et al. (US 5,500,935), hereinafter Moran.

As per claims 1, 9, 28, 31 and 46, Akiyama teaches a stylus-based computer (as shown in Fig. 1) comprising a two-button mouse-type input device (a tablet 14 and a LCD 17, see Fig. 1) and a method (a mouse function emulation method, see col. 1, line 61) for emulating a two-



Art Unit: 2629

button mouse-type input device (14, 17) comprising steps of receiving a stylus input from a user (a tap on a dedicated mode change icon, see col. 4, lines 9-10); responsive to the stylus input, displaying a user interface (a tool bar 172, see Figs. 4A-4B) having a plurality of selectable functions including a “MOVE” function, a “HELP” control function, a “RIGHT CLICK” function, and more functions (see col. 4, lines 7-13, col. 6, lines 1-2 and lines 38-43); receiving a user selection of “RIGHT CLICK” function via a pen 15 (see Fig. 1, col. 3, lines 21-22) after the computer input device (14, 17) being placed in a default mode (see col. 3, lines 57-67); and sending a right button event or a mouse button event modified by the selected function (“RIGHT CLICK” function). Further, Akiyama teaches the computer system comprising a CPU 11 for controlling the entire system and for executing the process for emulating a plurality of mouse functions, a RAM 12 for storing various kinds of application programs executed by the CPU (see Fig. 1, col. 3, lines 1-18). Akiyama also teaches that each mode can be locked or unlock depending on the interaction of the user (column 53-59). Accordingly, Akiyama discloses all the claimed limitations except that Akiyama does not disclose the selectable functions including a Shift, Control key, or Alternate key function, and the stylus input preceded by a predetermined gesture, as presently claimed.

However, regarding to the claimed limitation, “the selectable functions including a Shift, Control key, or Alternate key function”, Akiyama further teaches “However, the other mouse functions can be emulated by increasing the selection button of the other mouse functions” (see col. 6, lines 1-2 and lines 38-43). Therefore, while Akiyama may not exemplify particular selectable key function being a Shift, Control, or Alternate key function, one of ordinary skill in the art would have found it obvious to provide a Shift, Control, and/or Alternate key function(s)

Art Unit: 2629

in the user interface of Akiyama in accordance with a particular application and an allusion of Akiyama (see col. 6, lines 29-53).

Further, regarding to the claimed limitation, “the stylus input preceded by a predetermined gesture”, Moran discloses that both the concept and the advantages of providing a gesture before a stylus input in order to designate an action for the system to perform are well-known and expected in the art (col. 1, line 53 through col. 2, line 29). Further, it is noted that “providing a gesture before a stylus input in order to designate an action for the system to perform” inherently includes “determining whether the stylus input is preceded by a particular gesture. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to provide a gesture before a stylus input in the method of Akiyama, in view of the teaching in the Moran reference, because this would designate an action for the system based upon on the predetermined gesture, as taught by Moran, thereby avoiding an unwanted activation of the user interface due to an accidental tap on the mode change icon.

As to claim 7, as discussed above, Akiyama in view of Moran discloses all the claimed limitations of these claims except for the steps of starting an inactivity timer when the user interface is displayed and hiding the user interface when a predetermined amount of time elapses without receiving the user selection, of claim 7. However, Official Notice is taken that both the concept and the advantages of providing steps of starting an inactivity timer when the user interface is displayed and hiding the user interface when a predetermined amount of time elapses without receiving the user selection, in order to provide more room for other user interface or windows are well-known and expected in the art. Therefore, it would have been obvious to

Art Unit: 2629

provide steps of starting an inactivity timer when the user interface is displayed and hiding the user interface when a predetermined amount of time elapses without receiving the user selection, in the method of Akiyama, because this would provide more room for other user interface or windows.

As to claims 25 and 26, as seen from Figs. 3 and 4 in the Akiyama reference, Akiyama teaches that the location of a user interface (172) is static and does not depend upon a location of the stylus. Accordingly, Akiyama does not disclose expressly the location of the user interface depending upon the location of the stylus. However, Moran teaches in column 1, lines 65-67, “With menu functions, a visible menu is either located on a specified area of a display or appears near the stylus position when desired (pop-up menu)”, i.e., the location of the user interface depending upon the location of the stylus. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to utilize the teaching of Moran, i.e., providing the location of the user interface depending upon the location of the stylus, in the method of Akiyama, because one skilled in the art would recognize that this would reduce the amount of travel time required to invoke the new function mode displayed in the user interface.

As to claim 29, as noting in col. 1, line 53 through col. 2, line 29, Moran teaches the step of displaying including an inherent step of comparing the user input with a predetermined gesture in order to display the user interface.

As to claim 45, Akiyama further teaches that, when there is no instruction for changing modes, user input corresponds to the click of the left side mouse button (see col. 3, lines 58-67).

13. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Akiyama in view of Moran and in further view of Beernink et al. (US 5,612,719), hereinafter Beernink.

As to claim 4, as discussed in the rejection to claim 1 above, Akiyama in view of Moran discloses all the claimed limitations of these claims except for a step of hiding the user interface responsive to receiving a use selection, of claims 4 and 40. However, Beernink expressly discloses that when the user selects a “close box” 86, the window 78 (i.e., the claimed user interface) is closed (i.e., the window is hidden), see Fig. 4b and col. 6, lines 8-17. Therefore, it would have been obvious to one of ordinary skilled in the art at the time of the invention was made to provide step of hiding the user interface responsive to receiving a use selection, in the method of Akiyama in view of the teaching in the Beernink reference because this would provide more room for other user interfaces or main window.

14. Claims 30, 32-38, 41-44 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akiyama in view of Moran and in further view of Levine et al. (US 5,625,833), hereinafter Levine.

As to claim 30, as discussed above, Akiyama in view of Moran discloses all the claimed limitations except that Akiyama in view of Moran does not expressly teach the gesture being an in-air gesture, as presently claimed.

However, Levine teaches that in a stylus/tablet input device, the gesture includes the movement of the stylus in the air (column 6, lines 27-33), i.e., the use of an in-air gesture in the stylus/tablet input device. Therefore, it would have been obvious to utilize the in-air gesture in the method of Akiyama, in view of the teaching in the Levine reference, because this would avoid the stylus in contact with the tablet during making a gesture, thereby avoiding an unwanted activation of other functions, menus, or other application being displayed in the display area.

As to claims 32-37, 41-44, and 47, as discussed in the rejection to claims 1, 9, 28, 31 and 46 above, Akiyama in view of Moran discloses all the claimed limitations except that Akiyama in view of Moran does not expressly teach the gesture being an in-air gesture, as presently claimed.

However, Levine teaches that in a stylus/tablet input device, the gesture includes the movement of the stylus in the air (column 6, lines 27-33), i.e., the use of an in-air gesture in the stylus/tablet input device. Therefore, it would have been obvious to utilize the in-air gesture in the method of Akiyama, in view of the teaching in the Levine reference, because this would avoid the stylus in contact with the tablet during making a gesture, thereby avoiding an unwanted activation of other functions, menus, or other application being displayed in the display area.

As to claim 38, see the rejection to claims 25 and 26 above.

15. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Akiyama in view of Moran and Levine, as applied to claim 32 above, and in further view of Beernink.

As to claim 40, see the rejection to claim 4 above.

***Response to Arguments***

16. Applicant's arguments filed 08/31/2006 have been fully considered but they are not persuasive because as follows:

With respect to the claim objections in the Office Action dated 05/31/2006, these objections have been withdrawn in view of the amendment to the claims.

With respect to the rejection under 35 USC 112, first paragraph, in the Office action dated 05/31/2006, Applicants' arguments, see pages 8-10 of the amendment, have been fully considered but they are not persuasive because the disclosure indicated by the Applicants does not support for the claimed limitations, "receiving a user selection of at least one function selected from a list consisting of a shift function, a control key function, and an alternate function and sending a mouse button event modified by the selected function", e.g., the specification, page 5, does not disclose any information relating to the above underlined limitations, the specification, page 12, lines 10-18, does not expressly disclose a mouse button event being modified by selected one of a keyboard function alone, as claimed, and the specification, pages 13-16, expressly discloses that a selection of a keyboard function does not modify the mouse button event, but only activates the selected button, and a selection of a "Right" function" or "a "Bull-s-eye" function can modify the mouse button event. In other words, examiner believes that the original disclosure, when filed, does not support that by selecting a keyboard function alone, the mouse button event can be modified. For the reasons above, this rejection is maintained.

With respect to the rejection under 35 USC 102(e) and 103(a) in the Office action dated 05/31/2006, Applicants' arguments, see pages 10-14 of the amendment, have been fully considered but they are not persuasive because (i) see the new ground of rejection(s) above and (ii) in response to Applicants argument "Furthermore, Applicants have been unable to find anything in any of the cited references that discloses checking whether a predetermined in-air gesture preceded a stylus input...", as recited in claim 32 (see page 13, last paragraph, of the amendment), examiner directs the applicants to the rejection above, which discusses Akiyama teaching to provide a gesture before a stylus input and Levine teaching a gesture being an in-air gesture. In other words, the combination of Akiyama and Levine discloses the feature, "checking whether a predetermined in-air gesture preceded a stylus input".

### ***Conclusion***

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy H. Nguyen whose telephone number is 571-272-7675. The examiner can normally be reached on Monday - Thursday, 7:00 a.m. - 3:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached at 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

Art Unit: 2629

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JHN  
October 5, 2006

A handwritten signature in black ink, appearing to read 'JH Nguyen', with a stylized flourish extending to the right.

Jimmy H. Nguyen  
Primary Examiner  
Art Unit: 2629